INCH-POUND

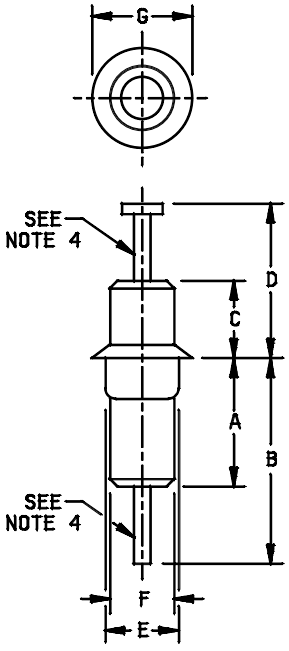
MIL-PRF-15733/51F
31 July 2003
SUPERSEDING
MIL-PRF-15733/51E
10 September 1986

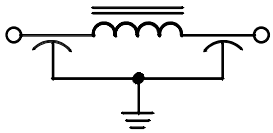
PERFORMANCE SPECIFICATION SHEET

FILTERS, RADIO FREQUENCY INTERFERENCE, STYLE FL48

This specification sheet is approved for use by all Departments and Agencies of the Department of Defense.

The complete requirements for acquiring the filters described herein shall consist of this specification sheet and the latest issue of MIL-PRF-15733.





TYPICAL CIRCUIT DIAGRAM

FIGURE 1. Dimensions and configuration.

Dash number	A		B		C		D		E		F		G	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
0001	.219 (5.56)	.281 (7.14)	.375 (9.52)	.437 (11.10)	.125 (3.18)	.187 (4.75)	.281 (7.14)	.343 (8.71)	.135 (3.43)	.150 (3.81)	.105 (2.67)	.140 (3.56)	.185 (4.70)	.205 (5.21)
0002	.204 (5.18)	.249 (5.94)	.749 (19.02)	.811 (20.60)	.141 (3.58)	.186 (4.34)	.281 (7.14)	.343 (8.71)	.130 (3.30)	.160 (4.06)	N/A	N/A	.188 (4.78)	.218 (5.54)

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are in parentheses and are given for information only.
3. Circuit diagram is for information only.
4. Leads shall be solid, solder-coated, AWG 20, .032 (0.81mm) diameter.
5. Suggested mounting hole diameter: .160 (4.06mm).

FIGURE 1 Dimensions and configuration (continued).

TABLE I. Electrical characteristics.

Dash no.	Operating temperature range	Rated voltage (volts)	Weight max (grams)	Capacitance min (pF)	1/ Minimum insertion loss (db) in accordance with MIL-STD-220, at										
					+25°C						-55°C and maximum operating temperature				
					5 MHz	10 MHz	20 MHz	100 MHz	1 GHz	10 GHz	5 MHz	10 MHz	20 MHz	100 MHz	10 GHz
0001	-55°C to +85°C	200 V dc 200 V rms	.8	5,500	---	15	21	55	70	70	---	3	8	40	70
0002	-55°C to +125°C	70 V dc	.8	22,000	20	25	20	70	70	70	5	10	5	65	70

1/ Insertion loss measurements shall be performed at full-load from 5 MHz to 20 MHz and at no-load above 20 MHz.

REQUIREMENTS:

Dimensions and configuration: See figure 1.

Case: Not applicable (metallic mounting eyelet).

Terminals: Solderable. Pure tin finish is prohibited.

Operating temperature range: See table I.

Rated voltage: See table I.

Rated current: 10 amperes, dc or ac (rms).

Insertion loss: In accordance with MIL-PRF-15733 and table I.

Seal: Not applicable.

Capacitance to ground: In accordance with MIL-PRF-15733. Measured capacitance shall be in accordance with table I.

Temperature rise: +25◦C, maximum.

Insulation resistance: In accordance with MIL-PRF-15733. The following detail and exception shall apply:

Test potential: Rated dc voltage.

Insulation resistance measured at 25◦C between either terminal and the case shall be at least 20,000 megohms.

Voltage drop: Not applicable.

Overload: In accordance with MIL-PRF-15733. The following exception shall apply:

Measurements at +25◦C after test:

Insulation resistance only shall be measured and shall meet initial requirements.

Terminal strength: In accordance with MIL-PRF-15733 and Method 211, MIL-STD-202; test condition A.

Applied force: 5 pounds.

Salt atmosphere (corrosion): Not applicable.

Thermal shock: Not applicable.

Immersion: Not applicable.

Shock (specified pulse): In accordance with MIL-PRF-15733 and Method 213, MIL-STD-202; test condition I.

Vibration, high frequency: In accordance with MIL-PRF-15733 and Method 204, MIL-STD-202; test condition D.

Moisture resistance: In accordance with MIL-PRF-15733. The following details and exceptions shall apply:

Polarization voltage: Not applicable.

Loading voltage: Not applicable.

Measurements after 24-hour drying period, at a temperature not to exceed +85°C (dash number 0001) or +125°C (dash number 0002), and a relative humidity of 50 percent:

Insulation resistance shall be not less than 1 gigohm.

Life: In accordance with MIL-PRF-15733 and Method 108, MIL-STD-202; test condition D. The following exception shall apply:

Measurements after test:

Insulation resistance shall be not less than 5,000 megohms.

Solderability: In accordance with MIL-PRF-15733 for both terminals and mounting termination.

Marking: Filters shall not be marked. Full marking, in accordance with MIL-PRF-15733, shall be marked on the unit package.

Part or Identifying Number (PIN): M15733/51- (dash number from table I).

Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extensiveness of the changes.

Custodians:
Army - CR
Navy - EC
Air Force – 11
DLA - CC

Review activities:
Army – AT, AV
Navy - AS, CG, MC, SH
Air Force - 19, 99

Preparing activity:
DLA - CC

(Project 5915-0424)